

PCT09

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/701,001B

DATE: 03/29/2002 PiS

TIME: 13:51:05

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Output Set: N:\CRF3\03292002\I701001B.raw

1.

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3 <110> APPLICANT: ONO, MITSUHARU
 4
        SOKA, TAKAYUKI
 5
         MORIMOTO, IKUO
        MIYAMURA, KOICHI
 8 <120> TITLE OF INVENTION: CELL SEPARATION DEVICE AND SEPARATION METHOD
10 <130> FILE REFERENCE: ASAHI-1-PC-1
12 <140> CURRENT APPLICATION NUMBER: 09/701,001B
13 <141> CURRENT FILING DATE: 2000-11-22
15 <150> PRIOR APPLICATION NUMBER: PCT/JP99/02711
16 <151> PRIOR FILING DATE: 1999-05-24
18 <150> PRIOR APPLICATION NUMBER: JP 159957
19 <151> PRIOR FILING DATE: 1998-05-25
21 <150> PRIOR APPLICATION NUMBER: JP 163023
22 <151> PRIOR FILING DATE: 1998-05-26
24 <160> NUMBER OF SEQ ID NOS: 66
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104 tct gga tac aca ttc act gac tat gtt ata aac tgg ttg aac cag aga
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105 Ser Gly Tyr Thr Phe Thr Asp Tyr Val Ile Asn Trp Leu Asn Gln Arg
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108 act gga cag ggc ctt gag tgg att gga gag att tat cct gga agt ggt
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109 Thr Gly Gln Gly Leu Glu Trp Ile Gly Glu Ile Tyr Pro Gly Ser Gly
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112 agt get tae tae aat gag atg tte aag gge aag gee aea etg aet gea
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113 Ser Ala Tyr Tyr Asn Glu Met Phe Lys Gly Lys Ala Thr Leu Thr Ala
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116 gac aaa too too aac aca goo tac atg cag ctc agc agc ctg aca tot
117 Asp Lys Ser Ser Asn Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser
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120 gag gac tet geg gte tat tte tgt gea aga ege gga aet ggg aeg ggg
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121 Glu Asp Ser Ala Val Tyr Phe Cys Ala Arg Arg Gly Thr Gly Thr Gly
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124 ttt gct tac tgg ggc cga ggg act ctg gtc act gtc tct gca
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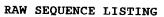
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| 144 | Ala | Ser | Gln | Ser | Val | Asp | Tyr | Asp | Gly | Asp | Ser | Tyr | Met | Asn | Trp | Tyr | |
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| 147 | caa | cag | aaa | cca | gga | cag | cca | CCC | aaa | ctc | ctc | atc | tat | gct | gca | tcc | 144 |
| 148 | GIn | GIn | Lys | Pro | Gly | Gln | Pro | | | Leu | Leu | Ile | Tyr | Ala | Ala | Ser | |
| 149 | | | 35 | | | | | 40 | | | | | 45 | | | | |
| 151 | aat | cta | gaa | tct | ggg | atc | cca | gcc | agg | ttt | agt | ggc | agt | ggg | tct | ggg | 192 |
| 152 | Asn | Leu | Glu | Ser | Gly | Ile | | Ala | Arg | Phe | Ser | Gly | Ser | Gly | Ser | Gly | |
| 153 | | 50 | | | | | 55 | | | | | 60 | | | | | |
| 155 | aca | gac | ttc | acc | ctc | aac | atc | cat | cct | gtg | gag | gag | gag | gat | gct | gca | 240 |
| 156 | Thr | Asp | Phe | Thr | Leu | | Ile | His | Pro | Val | Glu | Glu | Glu | Asp | Ala | Ala | - |
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| 159 | acc | tat | tac | tgt | cag | caa | agt | agt | gag | gat | cct | ccg | acg | ttc | ggt | gga | 288 |
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| | СТА | Thr | Lys | | GIu | He | Lys | | | | | | | | | | |
| 165 | | _ | | 100 | | | | | | | | | | | | | |
| 760 | | n - a | DA T | ~ NTA | ^ | | | | | | | | | | | | |
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| 218 | aag Lys | cct Pro | ggg Gly | gct Ala | tca Ser 165 | gtg | aag Lys | atg Met | tcc Ser | tgc Cys 170 | aag | gct Ala | tct Ser | gga Gly | Tyr | 160 aca Thr | 528 |
| 222 | ttc Phe | act Thr | gac Asp | \mathtt{Tyr} | gtt | ata Ile | aac Asn | tgg Trp | Leu | aac | cag Gln | aga Arg | act Thr | Gly | 175 cag Gln | ggc Gly | 576 |
| 226 227 | ctt Leu | gag Glu | Trp | 180 att Ile | gga Gly | gag Glu | att Ile | Tyr | 185 cct Pro | gga Gly | agt Ser | ggt Gly | Ser | 190 gct Ala | tac Tyr | tac Tyr | 624 |
| 231 | aat Asn | Glu | 195 atg Met | ttc Phe | aag Lys | ggc Gly | Lys | gcc Ala | aca Thr | ctg Leu | act Thr | gca Ala | 205 gac Asp | aaa Lys | tcc Ser | tcc Ser | 672 |
| 235 | aac Asn | 210 aca Thr | gcc Ala | tac Tyr | atg Met | Gln | 215 ctc Leu | agc Ser | agc Ser | ctg Leu | aca Thr | 220 tct Ser | gag Glu | gac Asp | tct Ser | gcg Ala | 720 |
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DATE: 03/29/2002 TIME: 13:51:05

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Output Set: N:\CRF3\03292002\1701001B.raw

| | | | NAME, | | | | 15) | | | | | | | | | | |
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| 270 |) Met | Lys | туг | Leu | Leu | Pro | Thr | Ala | Ala | Āla | Gly | Leu | Leu | ı Lei | ı Leu | Ala | 10 |
| 271 | L | L | | | 5 | i | | | | 10 |) | | | | 15 | ; | |
| 273 | gcc | cag | ccg | ged | : atg | gcc | cag | gtt | cag | ctg | caq | caq | tct | gga | cct | gag | 96 |
| 2/4 | H ATS | ı Glr | Pro | Ala | Met | Ala | Gln | Val | . Gln | Leu | Gln | Gln | Ser | Gly | Pro | Glu | |
| 275 |) | | | 20 | 1 | | | | 25 | | | | | 30 |) | | |
| 277 | ctg | gtg | r aag | cct | ggg | gct | tca | gtg | aag | atg | tcc | tgo | aag | gct | tct | gga | 144 |
| 2/8 | Leu | ı Val | . Lys | Pro | Gly | Ala | Ser | Val | Lys | Met | Ser | Cys | Lys | Ala | Ser | Gly | |
| 279 |) | | 35 | | | | | 40 | 1 | | | | 45 | | | _ | |
| 281 | . tac | aca | tto | act | gac | tat | gtt | ata | aac | tgg | ttg | aac | cag | aga | act | gga | 192 |
| 282 | Tyr | Thr | Phe | Thr | Asp | Tyr | Val | Ile | Asn | Trp | Leu | Asn | Gln | Arg | Thr | Gly | |
| 283 | | 50 | | | | | 55 | | | | | 60 | | | | | |
| 285 | cag | ggc | ctt | gag | tgg | att | gga | gag | att | tat | cct | gga | agt | ggt | agt | gct | 240 |
| 286 | GIN | GLY | Leu | Glu | Trp | Ile | Gly | Glu | Ile | ${	t Tyr}$ | Pro | Gly | Ser | Gly | Ser | Ala | |
| 287 | | | | | | 70 | | | | | 75 | | | | | 80 | |
| 289 | tac | tac | aat | gag | atg | ttc | aag | ggc | aag | gcc | aca | ctg | act | gca | gac | aaa | 288 |
| 290 | ryr | 'l'yr | Asn | GLu | Met | Phe | Lys | Gly | Lys | Ala | Thr | Leu | Thr | Ala | Asp | Lys | |
| 291 | | | | | 85 | | | | | 90 | | | | | 95 | | |
| 293 | Con | CCC | aac | aca | gcc | tac | atg | cag | ctc | agc | agc | ctg | aca | tct | gag | gac | 336 |
| 294 | ser | ser | Asn | Thr | Ala | Tyr | Met | Gln | Leu | Ser | Ser | Leu | Thr | Ser | Glu | Asp | |
| | | ~~~ | | 100 | | | | | 105 | | | | | 110 | | | |
| 200 | Cor | 315 | y LC | Tat | TTC | tgt | gca | aga | cgc | gga | act | ggg | acg | ggg | ttt | gct | 384 |
| 299 | ser | Ата | 115 | туг | Pne | Cys | Ата | | Arg | Gly | Thr | Gly | | Gly | Phe | Ala | |
| | | + ~ ~ | | ~~~ | ~~~ | | | 120 | | | | | 125 | | | | |
| 302 | Tur | Trn | 990 C11 | Ara | 999 | mbm | ctg | gtc | act | gtc | tct | gca | ggt | gga | ggc | ggt | 432 |
| 303 | TYL | 130 | СТА | ALG | GIY | THE | Leu | val | Thr | Val | Ser | | Gly | Gly | Gly | Gly | |
| | toa | | aas | aa+ | ~~~ | + | 135 | | | | | 140 | | | | | |
| 306 | Ser | Glv | Clv | 99 c | C117 | Cor | Class | ggt | ggc | gga | tcg | gac | att | gtg | ctg | acc | 480 |
| 307 | 145 | OLY | GLY | сту | СТУ | 150 | GTĀ | СТУ | Gly | СТУ | | Asp | шe | Val | Leu | | |
| | | tct | cca | act | tot | | aat | a+a | tct | a+ a | 155 | | | | | 160 | |
| 310 | Gln | Ser | Pro | Δla | Ser | Leu | Ala | y Ly Wal | Ser | Lou | 999 | cag | agg | gcc | acc | atc | 528 |
| 311 | | 001 | 110 | mu | 165 | Leu | АТа | val | Ser | 170 | GIY | GIII | Arg | Ата | | тте | |
| | tcc | tac | ааσ | acc | | caa | ant | att | gat | | a > + | ~~+ | ~-+ | | 175 | | F 77 C |
| 314 | Ser | Cvs | Lvs | Ala | Ser | Gln | Ser | Val | Asp | Tur | yaı. | ggt | gat | agt | tat | atg | 576 |
| 315 | | -1- | -10 | 180 | OCI | 0111 | Der | Val | 185 | тут | ASP | GLY | ASP | | туг | мет | |
| 317 | aac | tgg | tac | | caσ | aaa | cca | ааа | cag | cca | CCC | 222 | ata | 190 | 2+0 | +-+ | 624 |
| 318 | Asn | Trp | Tvr | Gln | Gln | Lvs | Pro | Glv | Gln | Dro | Dro | Luc | Tou | Tou | Tlo | Lat | 624 |
| 319 | | - | 195 | | | 1- | | 200 | OIII | 110 | rio | шуз | 205 | Leu | тте | TAT | |
| 321 | gct | gca | tcc | aat | cta | gaa | tct | | atc | cca | acc | agg | +++ | ant | ααα | aat | 672 |
| 322 | Āla | Ala | Ser | Asn | Leu | Glu | Ser | Glv | Ile | Pro | Ala | Ara | Pho | Ser | Clv | Sor | 672 |
| 323 | | 210 | | | | | 215 | 1 | | | | 220 | 1110 | DCI | GIY | 261 | |
| 325 | ggg | tct | ggg | aca | gac | ttc | | ctc | aac | atc | cat | | ata | σασ | αaα | aaa | 720 |
| 326 | Gly | Ser | Gly | Thr | Āsp | Phe | Thr | Leu | Asn | Ile | His | Pro | yal Val | Glu | Glu | Glu | 120 |
| 327 | 225 | | - | | • | 230 | | | | | 235 | 0 | | Jiu | Jiu | 240 | |
| 329 | gat | gct | gca | acc | tat | tac | tgt | caq | caa | agt | agt | gag | σat | cet | cca | aca | 768 |
| | | | | | | | - | - | | _ | - | , , | | | ~ ~ 7 | | , 50 |

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.







VERIFICATION SUMMARY

PATENT APPLICATION: US/09/701,001B

DATE: 03/29/2002 TIME: 13:51:06

Input Set : A:\Asahilpc.app

Output Set: N:\CRF3\03292002\I701001B.raw

L:404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 L:432 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15